VICIA LUTEA (FABACEAE) NEW TO TEXAS

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Vicia lutea L. (yellow vetch) has not been reported for Texas by Correll and Johnston (1970), Hatch et al. (1990), Jones et al. (1997), or Diggs et al. (1999). This species is easily distinguished from the other vetches found in Texas by its axillary sessile flowers, large yellow corollas, unequal calyx lobes, and pustulate-pilose fruits. Isely (1998) provides a key to separate this Vicia from others in the United States.

Vicia lutea is a weedy annual native to the Mediterranean region. However, the species is known to occur sporadically in North Carolina and Louisiana, and is seemingly naturalized in California (Hickman 1993). Thomas and Allen (1998) mapped it in nine northern Louisiana parishes. Personal communications with other herbaria have revealed additional collections:

ALABAMA. Lee Co.: 11 May 1961, Kendrick 83 (AUA). Sumter Co.: 1 May 1994, Thomas & Thomas 135,206 (BRIT). OREGON. Lane Co.: 17 Jun 1998, Koenig s.n. (OSC).

During field work for a county flora in east central Texas, Vicia lutea was collected in Madison County. A single, dense population of Vicia lutea was found in full anthesis along seven meters of a dry, sandy slope. The slope was along a roadside, in full sun, and adjacent to a gravel pit. Two weeks later the plants were leafless, yet held a large amount of ripening fruit. Other herbaceous species on the site included Polygala polygama, Coreopsis basalis, Lathyrus birsutus, Heliautbemum georgianum, Schizachyrium soparium, and Paspalum plicatulum. Woody vegetation along the nearby fenceline was composed of Overtus marilandica, O. falcata, and Prims taeda.

The plants at the Madison County site were found at a relatively undisturbed roadside area that is not mowed. The presence of this population may be attributed to traffic associated with a nearby gravel pit, or to cartle and hay transport through this rural area. Upon inspection of previous Madison County collections not yet identified, another specimen of Vicia lutea was found. That individual [Madison Co.: 11 April 1998. A.K. Neill 1458 (TAMU)] was collected at anthesis approximately 27 miles southwest of the voucher specimen, but the reproductive success of that population has not been established.

Vicia lutea may remain a waif in humid, non-Mediterranean climates. One

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visible effect of humidity on the Madison County population was an infection with powdery mildew fungus; the mycelial layer imparted a silvery cast to the leaf surfaces. Additional collections of this species may be expected from Texas and other warm-climate states. Images of the vouches specimen are available at Texas A&M's Bioinformatics Working Group Image Gallery page (http://www.csdl.tamu.edu/FLORA/ imaxxfab.htm).

Voucher specimen: U.S.A. TEXAS. Madison Co.: Roadside cut-bank of Chazos loamy sand at entrance to gravel pit, W side of FM 247, 1.8 m is Of TX Hwy 21 jet. (at Midway). Sand Ridge Quadrant, else. 217 ft, 30°00, 95°44°W, I May 1999, A.K.Neil 2618 GTAMU).

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